



United States Steel Corporation – Midwest Plant
U. S. Highway 12
Portage, IN 46368

VIA ELECTRONIC SUBMITTAL

January 11, 2019

Bridget S. Murphy
Office of Water Quality
Indiana Department of Environmental Management (IDEM)
100 North Senate Avenue – Post Office Box 6015
Indianapolis, IN 46206

Subject: United States Steel Corporation – Midwest Plant
NPDES Permit IN0000337
Inspection Summary / Noncompliance Letter

Dear Ms. Murphy:

This letter is the written response to the inspection summary for November 29, 2018 and December 3, 2018 at the U. S. Steel Corporation – Midwest Plant (“Midwest”). The inspection summary, dated December 12, 2018 requested the detailed response documenting correction of the concerns and/or a plan for assuring future compliance be submitted to the Department within 30 days of receipt of the letter. The Department’s concerns and U. S. Steel’s corrective actions are detailed below.

The referenced inspection was conducted in response to an anonymous complaint that was made to the IDEM Spill Line on November 28th, 2018 which was forwarded to Dave Greinke of IDEM. Mr. Greinke observed Outfalls 003 and 004 on November 28th. Foaming action was observed at Outfall 004 as well as some minor foaming action at Outfall 003. Outfall 004 is a permitted outfall to the Portage-Burns Waterway under NPDES Permit IN0000337 effective April 1, 2016. Outfall 004 sources includes the Final Treatment Plant (internal Outfall 104) and the Chrome Treatment Plant (internal Outfall 204), as well as non-contact cooling water and stormwater. Outfall 002 and 003 are permitted to discharge non-contact cooling water and stormwater.

The following day, November 29th, Mr. Greinke, along with Nick Ream and Rick Massoels of IDEM observed Outfalls 002, 003 and 004. No foaming action was observed on the 29th by IDEM during their inspection, however IDEM was notified by the National Parks Service that an alleged intermittent discharge of foaming action from Outfall 004 did occur in the afternoon on the 29th. This was attributed to Midwest operators adjusting the defoamer feed rate to optimize the delivery system. A third visit by IDEM was conducted on December 3, 2018. No foaming action issues were observed at the time.

A U. S. Steel representative collected a sample of the Outfall 004 discharge on November 28th which was analyzed for surfactants and oil and grease. No surfactants were detected, and the oil and grease concentration was within normal operating ranges. Additionally, U. S. Steel received the routine NPDES 24-hour composite sample and grab sample results which were all below permit limits for all the constituents, including hexavalent chromium. Both the Chrome Treatment Plant and Final Treatment Plant internal process monitoring logs indicated normal operations with no issues. There were no spills or leaks that occurred in the facility during this time frame that would have contributed to the foaming action. U. S. Steel's investigation concluded the foaming action in the turbulent discharge was due to an insufficient defoamer feed rate for the receiving water conditions at the time of discharge.

U. S. Steel made numerous observations of Outfall 004 and the Burns Waterway throughout the day beginning on November 28th and extending for several days after. Midwest installed a new redundant defoamer PolyBlend mixing system and pump skid shortly after the incident, and the system is now operational. U. S. Steel increased the defoamer addition rate within the IDEM approved dosing range, and has also requested an increase in chemical additive dosing rate from IDEM to account for variable conditions in the receiving water. While optimizing the new pump skid and defoamer addition rate, U. S. Steel will continue to operate the new and existing defoamer skids to ensure sufficient defoamer is introduced to the system, and will continue to work to optimize an efficient dosage rate.

U. S. Steel has proactively requested chemical additive approval to dose ChemTreat FO120 defoamer at Outfalls 002 and 003 as well. U. S. Steel is currently evaluating the feasibility of installing and operating pump skids at these locations.

If you have any questions about this matter, please call me at (313) 749-3900 or email me at APiscitelli@uss.com.

Sincerely,



Alexis Piscitelli
Director – Environmental Compliance
United States Steel Corporation
Great Lakes Works, Midwest Plant

cc: Nicholas Ream, IDEM
Tim Sullivan, U. S. Steel
Eric Williams, U. S. Steel
Nicole Benoit, P.E., U. S. Steel